

# Environmentally Preferable Carpet



Department of Executive Services  
Finance and Business Operations Division  
Procurement and Contract Services Section  
**Environmental Purchasing Program**  
[www.kingcounty.gov/procurement/green](http://www.kingcounty.gov/procurement/green)  
206-263-9294 TTY Relay: 711

- ▶ **INTRODUCTION**
- ▶ **STANDARDS AND GUIDELINES**
  - Carpet Choice and Maintenance Guidelines
  - Standards and Certifications
- ▶ **USAGE HISTORY AND EXPERIENCE**
  - Carpet Recycling
- ▶ **BID AND CONTRACT LANGUAGE**
- ▶ **FOR MORE INFORMATION**
- ▶ **VENDOR INFORMATION**

## INTRODUCTION

Few building products are as ubiquitous as carpets and rugs, which cover 70% of U.S. floors, according to the Carpet and Rug Institute, the industry's trade association. A carpet's lifecycle impacts include chemical emissions from manufacturing, depletion of petroleum and other natural resources, transportation, indoor air quality concerns, and disposal costs at landfills and recycling operations. Choosing carpet that minimizes these impacts is especially important given the huge amount of carpeting used in the United States and its relatively short expected useful lifetime. Most carpet manufactured and installed in the U.S. is made of synthetic materials, especially nylon, polyester, and polypropylene face fibers, and most backings are made as a sandwich of polypropylene fabric and latex or PVC. Most commercial carpets are made by bonding a face fiber to a backing fiber, using one of a variety of strong bonding agents. Nylon 6 and nylon 6.6 account for nearly two-thirds of the face fiber market, with polyester as the next most commonly used fiber.

There are many ways that carpet can be made more sustainable. Many companies offer recycled content backing, modular tiles that extend carpet life, recycled content cushion, low or no-VOC adhesives, refurbishing programs that extend carpet life, and recovery programs that keep carpets out of the landfill. Several manufacturers have even committed to reduce the life-cycle impacts of carpet by reducing emissions during manufacture, using solar or other renewable energy to power their plants, and making a commitment to reducing waste, toxics, and non-renewable resource depletion.

## STANDARDS AND GUIDELINES

### Carpet Choice and Maintenance Guidelines

Several environmentally responsible carpet options are available, each with their own merits and considerations, and what you choose will depend on your specific application. Consider the following when choosing a new carpet:

- The type of fiber (i.e., nylon— nylon 6 or nylon 6.6, polyester, P.E.T., wool), the recycled content, durability, and the recyclability of the face fiber, backing, and cushion
- Carpet fiber construction and pile type, which determine appearance and performance
- Using carpet tiles rather than rolls to facilitate repair and extend the useful life of the carpet
- Colors and patterns that hide wear

- Carpet fiber construction (manufactured by tufting, weaving, and fusion bonding, of which tufting is the most common) and pile type (loop, cut, or combination), which determine appearance and performance. Lower pile height and higher pile yarn density is better for high traffic areas and gives the best performance.
- Backing or carpet cushion with high recycled content and/or minimal resource use
- Environmentally preferable adhesives, and pre-applied adhesives for less waste
  - Some carpet tiles come with pre-applied adhesives for ease of installation. This type of tile tends to emit less VOCs because it does not require a separate adhesive application during installation.
- Use carpet only where necessary, and maintain and clean it properly to maximize its life.
- Proper installation
- Proper maintenance - [Carpet and Rug Institute Carpet Maintenance Guidelines](#)
- Recycling your old carpet to keep it out of the landfill

## Standards and Certifications

- Sustainable Carpet Assessment Standard [NSF/ANSI Standard 140-2007e](#)

The standard ranks products as bronze, silver, gold, or platinum, evaluating them in terms of sustainability in the areas of public and environmental health, recycled and biobased content, manufacturing process, and end-of-life management.

*"The new NSF 140-2007 Standard will help facility managers ensure the best product for their needs."* Today's Facility Manager website
- [SCS Certified](#)

[Sustainable Carpet](#)

SCS made that standard equivalent to the higher two levels of NSF 140 and certifies products to the standard through its Sustainable Choice program.

[FloorScore](#) – indoor air quality
- [California Gold Sustainable Carpet Standard](#)
- [Carpet and Rug Institute \(CRI\) Green Label Plus certification for Indoor Air Quality \(IAQ\)](#)

Certifies carpet, cushions, and adhesives
- [Carpet America Recovery Effort](#)

Carpet America Recovery Effort (CARE) is a joint industry-government effort to increase the amount of recycling and reuse of post-consumer carpet
- [GreenGuard](#)

Indoor Air Quality for resilient flooring and adhesives

## USAGE HISTORY AND EXPERIENCE

King County agencies buy carpet, cushions, adhesives and installation services for small remodels and renovation projects through the State of Washington flooring contract. Many of the products available have certifications for recycled content and other elements of environmental preferability, including low emissions of VOCs.

In the past year, King County purchased approximately 8,000 yards of carpet through this contract for installation in twenty small projects at a cost of nearly \$275,000. Approximately 3,000 yards of this carpet were certified as Environmentally Preferable Products (EPP) by Scientific Certification Systems (SCS) and met the California Gold and Platinum Sustainable Carpet Standard. All carpet and adhesives met the

Carpet and Rug Institute (CRI) Green Label Plus certification for Indoor Air Quality (IAQ). Carpet was also recycled under this contract.

In late 2007, a new national standard called “Sustainable Carpet Assessment Standard” (NSF 140-2007) was created by NSF International, a not-for-profit, American National Standards Institute (ANSI)-accredited public health organization. The NSF standard was developed by a joint committee under the guidance of NSF International, through a documented consensus process. The State of California worked closely with this group and will make the transition to this standard from their currently mandated California Gold Standard. SCS also will change their EPP standard to NSF.

The King County Green Building Policy (2008) requires large construction projects follow the US Green Building Council’s Leadership in Energy and Environmental Design (LEED) guidelines for choosing flooring products.

### **Carpet Recycling**

In the past year, King County agencies recycled over 5,300 yards of used carpet through the State of Washington flooring contract. Agencies use this service when they are replacing existing carpet with new flooring materials. The reclaimed carpet is collected at a local warehouse and then shipped to a carpet manufacturer to be turned into carpet pad, car parts and other products.

### **BID AND CONTRACT LANGUAGE**

King County currently uses the State of Washington contract for flooring. This contract expired in June, 2008 and stakeholder meetings are currently in progress to determine further action.

[State of Washington Flooring Contract](#) (expired June, 2008)

### **FOR MORE INFORMATION**

- [Green Seal’s Choose Green Report on Carpet](#)
- [EPA’s Product Stewardship Report on Carpet](#)
- [Environmental Building News - Carpet](#)
- [Green California - Carpet](#)
- [State of Washington Floor Covering Fact Sheet](#)

### **VENDOR INFORMATION**

King County’s current vendor:

[Great Floors](#) – installs carpet and collects carpet for recycling

Distributes: [Tandus](#) (C&A – tile Monterey & Crossley – broadloom), Shaw, Milliken, [Lees](#) (division of [Mohawk](#)), [Mannington](#)